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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/658,688 09/10/2003		Gary G. Hermanson	1530.0460002/EJH/J-H	3461		
26111 75	590 12/29/2005		EXAM	EXAMINER		
-	SSLER, GOLDSTEIN & RK AVENUE, N.W.	BASKAR, PA	BASKAR, PADMAVATHI			
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER		
	,		1645			

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Applicat	Application No. Applicant(s)					
		10/658,6	388	HERMANSON, G	HERMANSON, GARY G.			
		Examine	r	Art Unit				
		Padmava	athi v. Baskar	1645				
Period fo	The MAILING DATE of this communic or Reply	ation appears on th	e cover sheet with the	correspondence ad	idress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)	Responsive to communication(s) filed	on .						
2a)□								
3)								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)🖂	☑ Claim(s) <u>136-214</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)	Claim(s) is/are rejected.							
7)								
8)⊠	Claim(s) <u>136-214</u> are subject to restrict	ction and/or election	n requirement.					
Applicat	on Papers							
9)[	The specification is objected to by the	Examiner.			,			
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	ınder 35 U.S.C. § 119							
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
`	see the attached detailed Office action	ioi a list of the cer	illied copies not receiv	veu.				
Attachmen	t(e)							
_	u(s) e of References Cited (PTO-892)		4) Interview Summar	v (PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTC	Paper No(s)/Mail [	Date	0.450)				
	nation Disclosure Statement(s) (PTO-1449 or P <sup>-</sup> r No(s)/Mail Date	TO/SB/08)	5) Notice of Informal 6) Other:	Patent Application (PT	O-152)			

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## Restriction

1. Claims 1-135 have been canceled.

Claims 136-214 have been added.

- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims136-173 and 175--213 drawn to an isolated polynucleotide and a composition comprising said polynucleotide classified in class 536 subclass 23.7 (Further restriction to one invention is required, see Para # 3)
- II Claims 174 and 214 drawn to a method of treating anthrax infection comprising administering a composition comprising a nucleic acid fragment classified in class 514, subclass 44.

(Further restriction to one invention is required, see Para #3)

## **Distinct Inventions**

3. The inventions are distinct, each from the other because of the following reasons:

Group 1 invention is drawn to different and patentably distinct polynucleic acid fragment encoding polypeptide and a composition comprising said polypeptides. Group II invention is drawn to a method of treating anthrax using patentably distinct and structurally different polynucleic acid fragment encoding polypeptide.

For each group of inventions I-II above, restriction to one of the following coding regions and SEQ.ID.NO is also required under 35 USC 121. Each group of invention is drawn to distinct and different codon optimized polynucleic acid coding region for the polypeptide that contains phenylalanine codon, leonine codon isoleucine codon, leucine codon, valine codon, serine codon, proline codon etc. Therefore, election is required of one of inventions I – II and one of polynucleic acid encoding polypeptide 2, 4, 6, 7, 8, 10, 12, 13, 16, 26 and 40.

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Inventions SEQ ID NO: 2, 4, 6, 7, 8, 10, 12, 13, 16, 26 and 40 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions; represent structurally different polynucleotide encoding polypeptides. Therefore, where structural identity is required, such as for hybridization or expression the different sequences have different effects. Thus, each sequence is unique and patentably distinct since each sequence has a different structure with specific amino acid or nucleic acid and is identified by a specific SEQ.ID.NO. Restriction is deemed proper because these products appear to constitute patentably distinct inventions. These sequences are thus deemed to constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such sequence is presumed to represent an independent and distinct invention, subject to restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141.

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- 4. Invention I is related to inventions II as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polynucleic acid fragment encoding polypeptide of Group I can be used in making hybrid clones of anthrax and need not be used in the inventions II.
- 5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their separate classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 6. The examiner has required restriction between product and process claims Where applicant elects claims directed to the product, and a product claim is subsequently found

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allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP 821 .04.

Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1 .1 16. amendments submitted after allowance are governed by 37 CFR 1 .312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 1 12. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Further, note that the prohibition against double patenting rejections of 35 U.S.C.121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP 804.01.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventor ship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventor ship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143)

- 8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 9. Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. Papers should be transmitted via the PTO Fax Center, which receives transmissions 24 hours a day and 7 days a week. The transmission of such papers by facsimile must conform to the notice published in the Official Gazette, 1096 OG 30, November 15, 1989. The Right Fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PMR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PMR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Padma Baskar Ph.D., whose telephone number is ((571) 272-0853. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 6.30 a.m. to 4.00 p.m. except First Friday of each bi-week.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on (571) 272-0864. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Padma Baskar Ph.D.

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